

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMER United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/601,789	06/24/2003	Norio Kimura	2003-0865	9516
513 7	7590 10/18/2004		EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			SHAKERI, HADI	
2033 K STREI SUITE 800	ET N. W.		ART UNIT	PAPER NUMBER
	N, DC 20006-1021		3723	<u> </u>
			DATE MAILED: 10/19/200	4

DATE MAILED. 10/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	7-				
	10/601,789	KIMURA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Hadi Shakeri	3723					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed /s will be considered timely. I the mailing date of this communication (C) (35 U.S.C. § 133).	n.				
Status							
1) Responsive to communication(s) filed on							
· · .	action is non-final.						
3) Since this application is in condition for allower		osecution as to the merits is	s				
closed in accordance with the practice under E	•						
Disposition of Claims							
4) Claim(s) 17-35 is/are pending in the application	n.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>17-35</u> is/are rejected.		•					
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on 30 June 2004 is/are: a)	⊠ accepted or b) objected to	by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(c	d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 	s have been received. s have been received in Applicati	on No. <u>09/897,918</u> .					
3. Copies of the certified copies of the prior		ed in this National Stage					
application from the International Bureau		1					
* See the attached detailed Office action for a list	or the certified copies not receive	; G.					
Attachment(s)							
1)	4) Interview Summary Paper No(s)/Mail D						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>063004</u>. 		Patent Application (PTO-152)					

Application/Control Number: 10/601,789

surface of a turntable of a polishing apparatus.

Art Unit: 3723

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Lenkersdorfer '844 or Sandhu et al. '642 in view of Watanabe et al. '368.

Both Lenkersdorfer and Sandhu et al. disclose all of the limitations of

claims 17, 24, 29, and 32, i.e., a polishing table having a polishing surface, a substrate carrier having a lower surface for holding a substrate and bringing the substrate into contact with said polishing surface, and an image processing apparatus substrate, i.e., film thickness measuring apparatus as defined by the specification as originally filed, for recognizing a circuit wiring pattern formed on the wherein said substrate carrier is positionable over the polishing table and the image processing apparatus, except for disclosing an attitude control mechanism for keeping the lower surface of the substrate carrier parallel with the polishing surface. Watanabe et al.

teaches polishing apparatus which can control the attitude of the top ring with respect to a

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of either Lenkersdorfer or Sandhu et al. with the attitude control mechanism as taught by Watanabe et al. to provide a uniform polishing surface pressure across the entire polish surface.

Application/Control Number: 10/601,789

Art Unit: 3723

Regarding claims 18-23, 25-28, 30, 31 and 33-35, Lenkersdorfer as modified by Watanabe et al. meets the limitations note that with respect to the apparatus, e.g., slurry nozzle is capable of supplying different types of slurry, i.e., first and second.

Regarding claims 19-23, 26, 28, 31, 33 and 35, Sandhu et al. as modified by Watanabe et al. meets the limitations as noted above. With regards to claims 18, 25, 27, 30 and 34; Sandhu et al. as modified by Watanabe meets all the limitations except for a water nozzle in addition to a slurry nozzle. Polishing apparatus having Water nozzle to clean the workpiece and/or the tool prior or after polishing is known in the art as evident by the prior art cited, e.g., Lenkersdorfer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus with a water nozzle, in vie of Lenkersdorfer to clean the workpiece and/or the tool, dependent on work-piece and/or operational parameters, which would involve only routine skill in the art.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 4

Application/Control Number: 10/601,789

Art Unit: 3723

Response to Arguments

4. Applicant's arguments with respect to claims 17-35 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is 703-308-6279. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail, III can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hadi Shakeri
Primary Examiner
Art Unit 3723

October 13, 2004